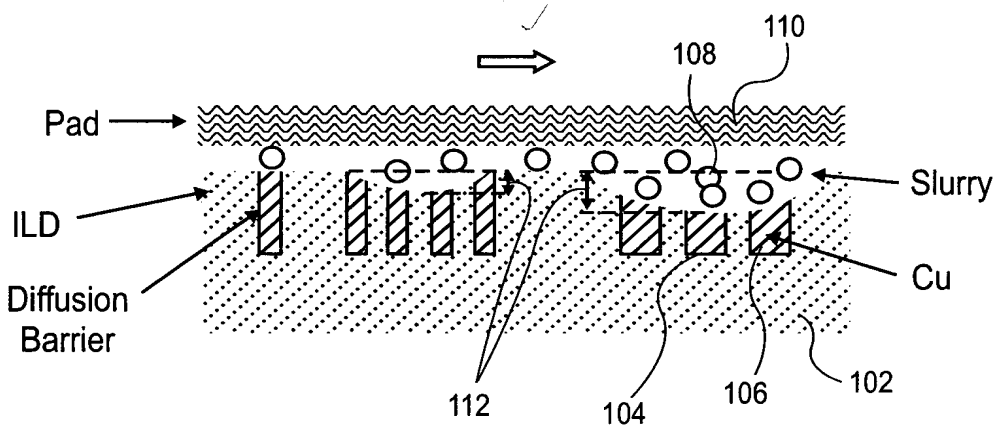

FIG. 1

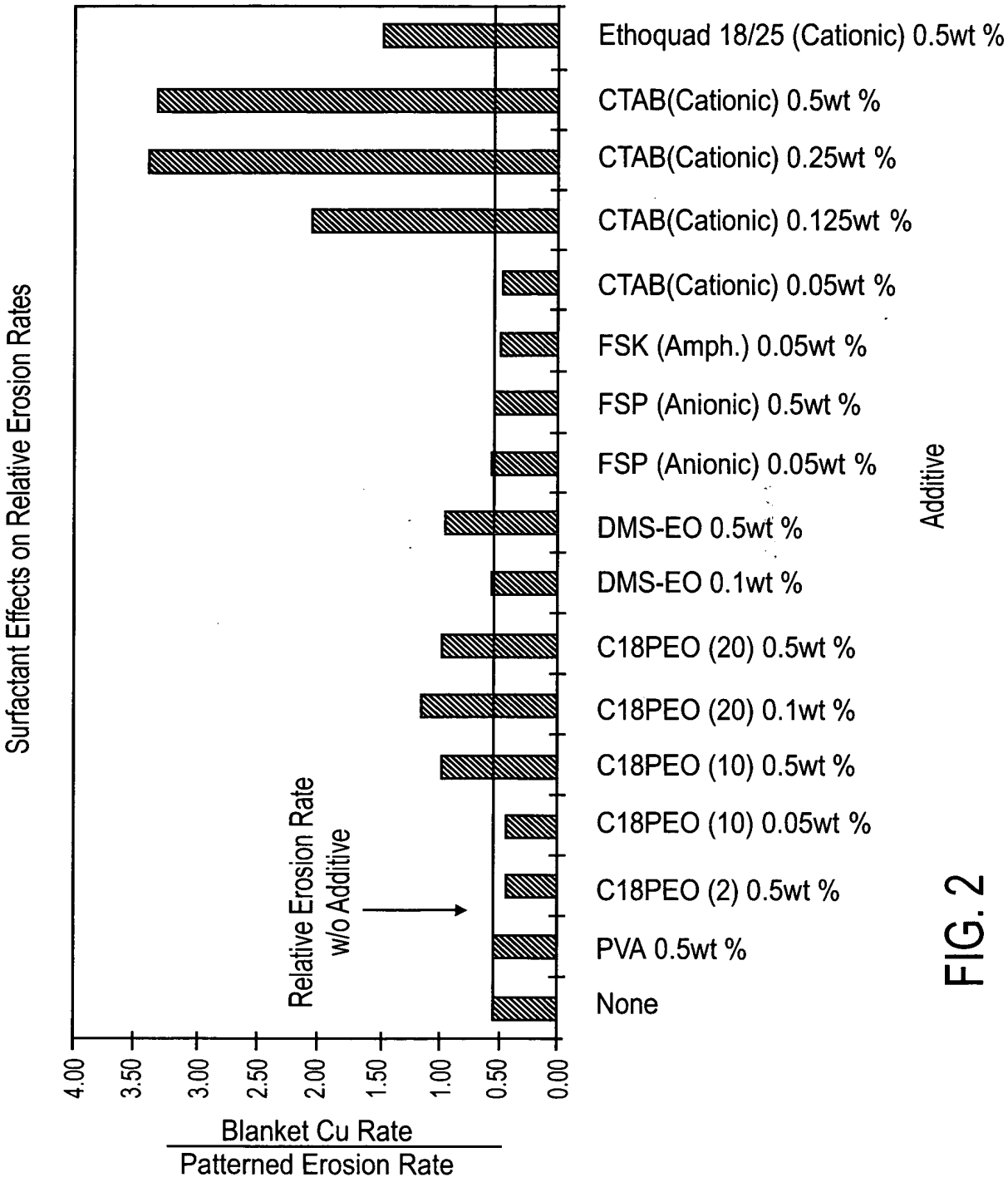

FIG. 2

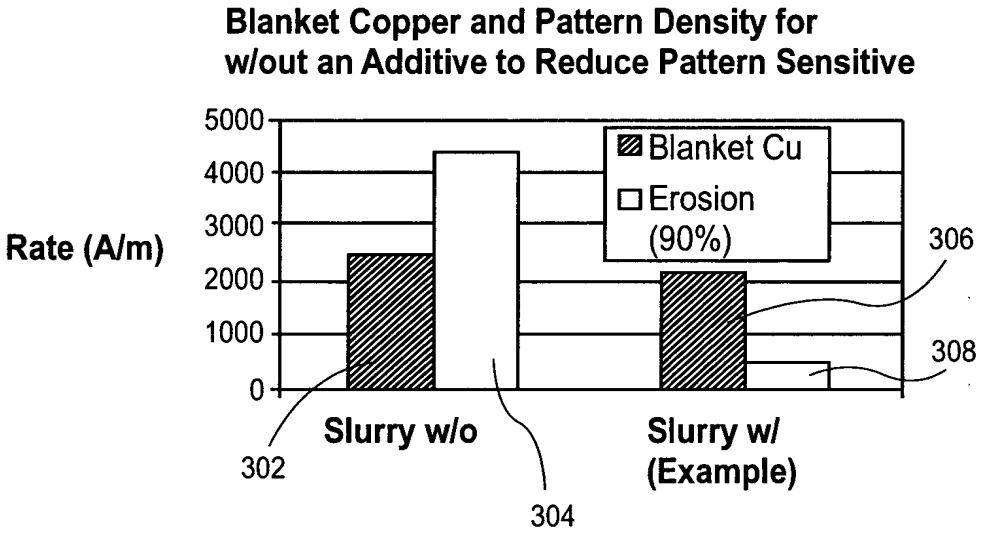

FIG. 3

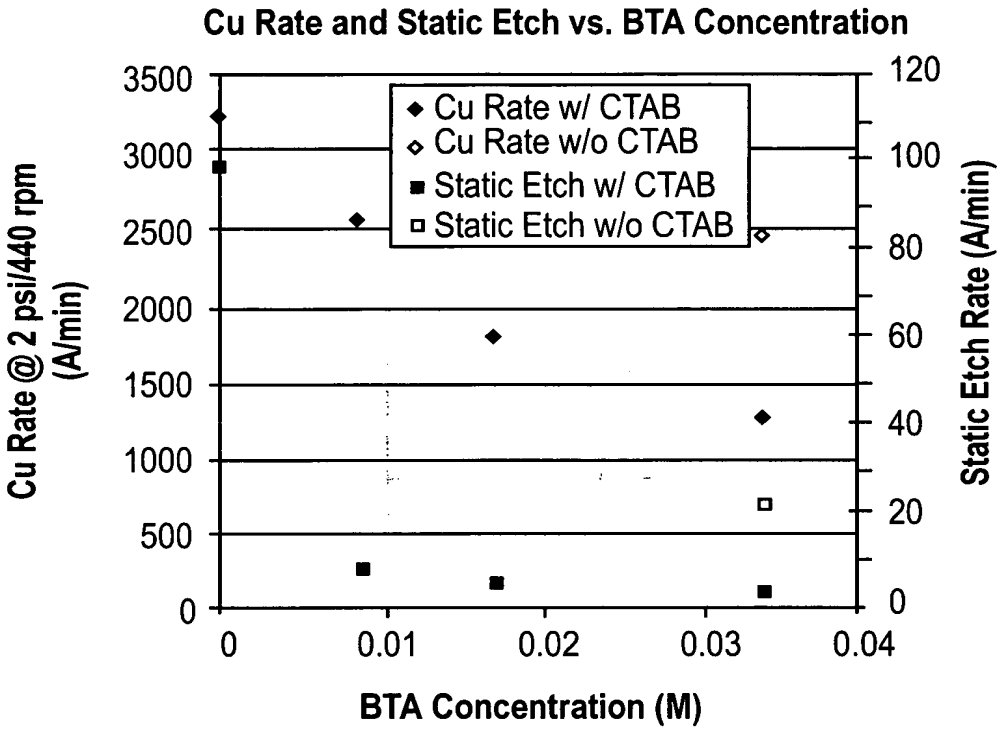

FIG. 4

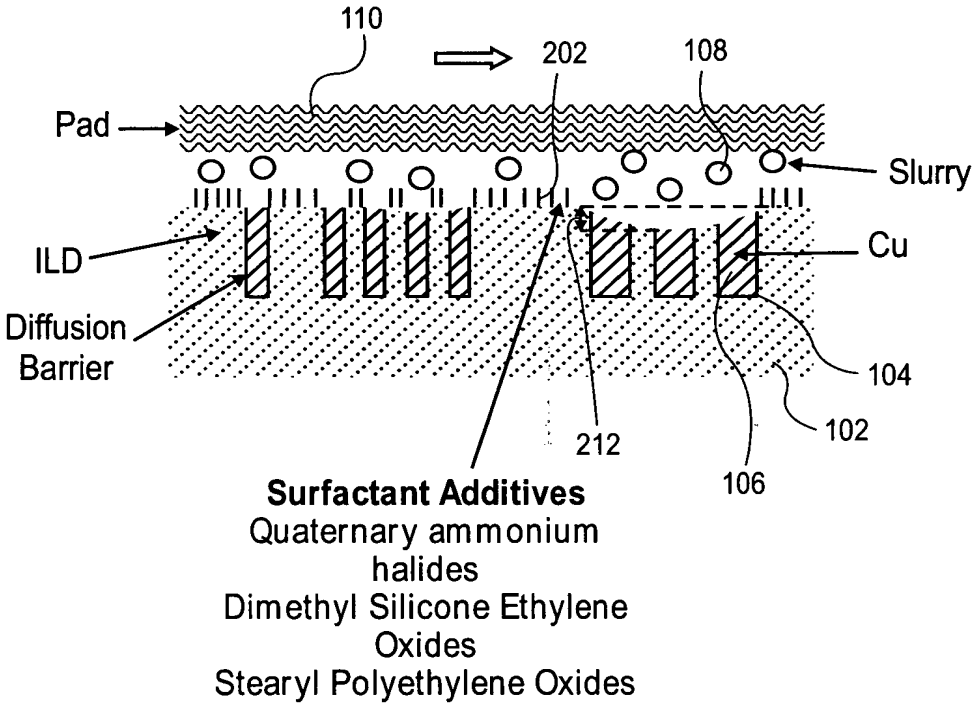

FIG. 5

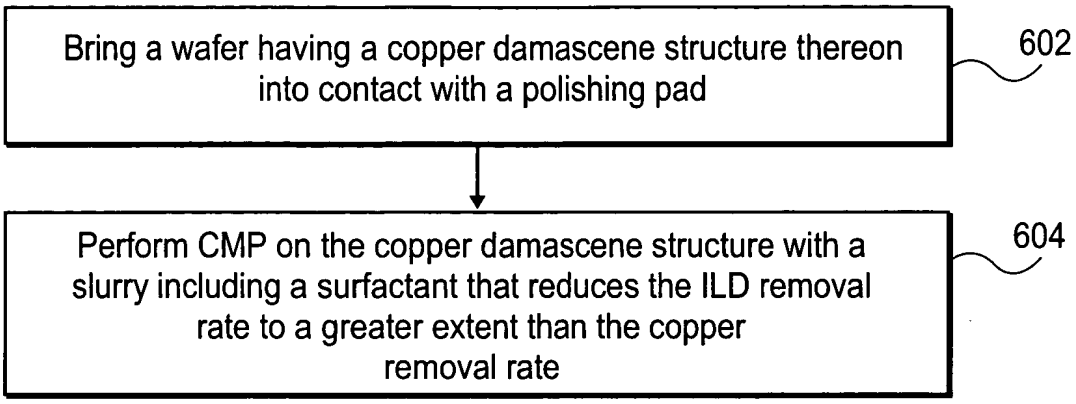

FIG. 6

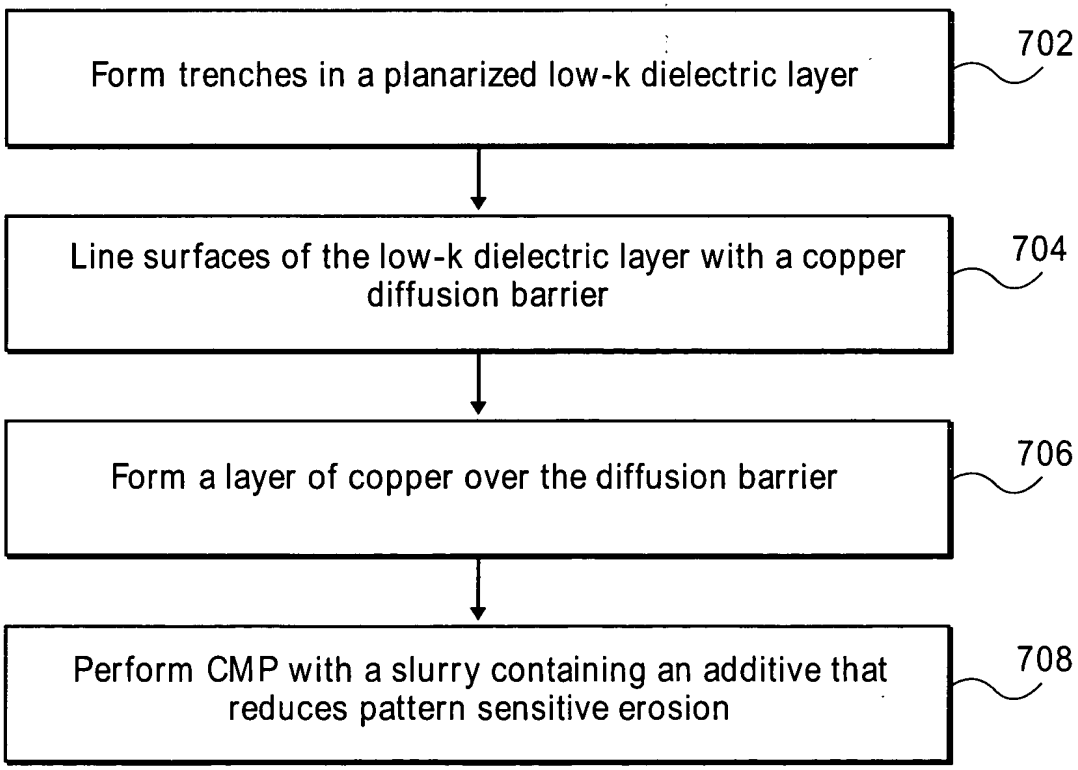

FIG. 7

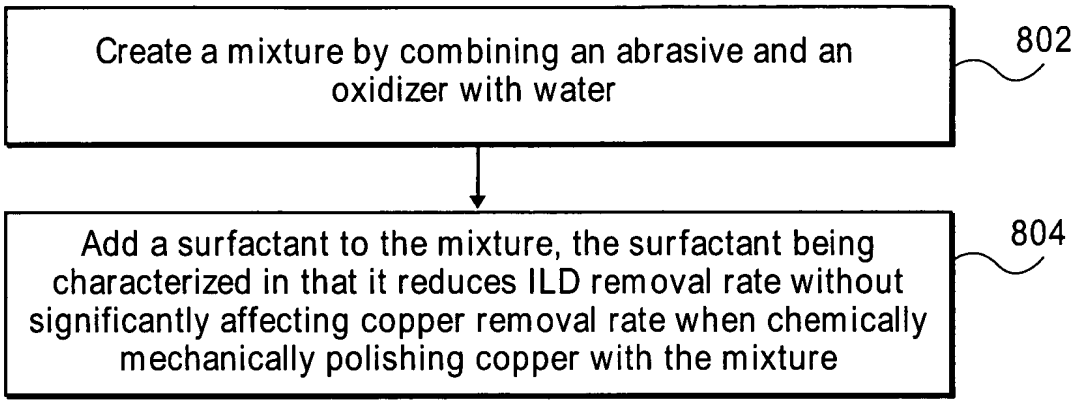

FIG. 8

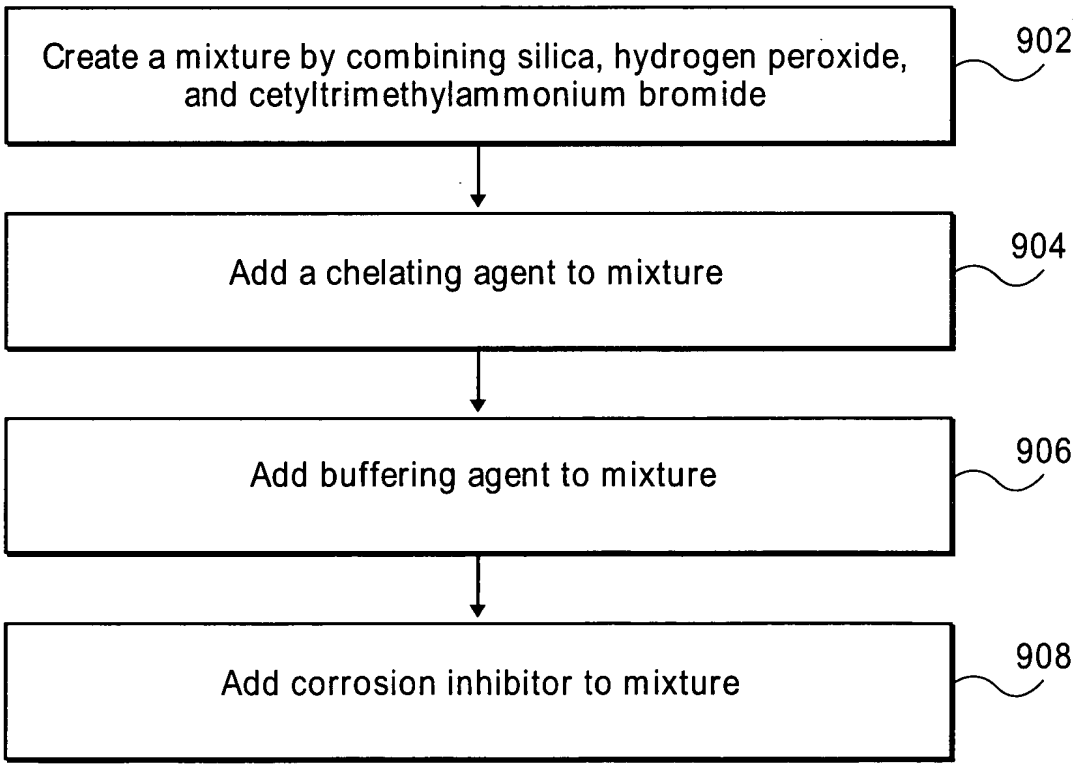

FIG. 9

Abbreviation	Name	Chemical Formula	Surfactant Type	ILD Interation Site
PVA 0.5 wt%	Polyvinylalcohol	$[-CH_2CH(OH)]$(MW=85,000-146,000)	nonionic	Si-O-Si, OH
C18PEO(2)	Polyoxyethlene(2)stearylether	$C_{18}H_{37}(OCH_2CH_2)_2OH$	nonionic	Si-O-Si, OH
C18PEO(10)	Polyoxyethlene(10)stearylether	$C_{18}H_{37}(OCH_2CH_2)_{10}OH$	nonionic	Si-O-Si, OH
C18PEO(20	Polyoxyethlene(20)stearylether	$C_{18}H_{37}(OCH_2CH_2)_{20}OH$	nonionic	Si-O-Si, OH
DMS-EO	Ethylene oxide modified	$Me_3SiO\{MeSi(O)[C_2H)_3(OCH_2CH_2)xOMe]\}[MeSiO](SiMe_3)$*	nonionic	Si-O-Si, OH
FSP	Phosphate fluorsurfactant	$[F(CF_2CF_2)zCH_2CH_2O]xP(O)(ONH_4)y$	anionic	$SiOH_2^+$
FSK	Amphoteric fluorsurfactant	$F(CF_2CF_2)yCH_2CHO(Ac)CH_2N^+(CH_3)_2CH_2COO^-$	amphoteric	SiO^-, $SiOH_2^+$
CTAB	Cetyltrimethylammonium bromide	$C_{16}H_{33}N(CH_3)_3Br$	cationic	SiO^-
Ethoquad 18/25	Octadecylmethylpolyoxyethylene (15)ammonium	$RN(CH_3)[CH_2CH_2O)\sim7.5H][CH_2CH_2O]\sim7.5^+HCl$*	cationic	SiO^-
K-Oleate 0.5	Potassium Oleate	$CH_3(CH_2)_7CH=CH(CH_2)_7CO_2K$	anionic	$SiOH_2^+$

* $Me=CH_3$, R=Hydrocarbon group, alkyl=Alkyl group

FIG. 10